

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1, 4, 7-10, 12-16, 18, and 20-23 are pending in the application, with claims 1, 7, 12, and 16 being the independent claims. Claims 2, 3, 5, 6, 11, 17, and 19 were previously cancelled without prejudice to or disclaimer of the subject matter therein. Claims 1, 7, 10, 12, 14, and 16 are sought to be amended. Applicants reserve the right to prosecute similar or broader claims, with respect to the cancelled and amended claims, in the future. Support for the amendments is found in U.S. Publication No. 2002/0077981 to Takatori *et al.* (alternatively, "the Specification") at least at, for example, paragraphs [0019] and [0027] - [0030] and FIGs. 1-3. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Statement of Substance of Examiner Interview

Applicants' representative gratefully acknowledges the courtesies extended by the Examiner in granting a telephone interview on October 27, 2010. In the interview, the Examiner clarified the objections to claims 1, 7, 12, and 16 and the claim rejections under 35 U.S.C. § 103. During the interview, the Applicants' representative discussed proposed claim amendments with the Examiner to overcome the objections to claims 1, 7, 12, and 16 and the Examiner agreed that the proposed amendments would overcome

the objections to those claims. The Examiner also clarified comments regarding his interpretation of the teachings of the applied references. In particular, the Examiner clarified his comments regarding independent claims 1, 7, 12, and 16 and the teachings of Alfano and Bergins. Applicants' representative discussed distinctions between claims 1, 7, 12, and 16 and the applied references. During the interview, Applicants' representative also discussed proposed amendments to independent claims 1, 7, 12, and 16 to address the rejection under 35 U.S.C. § 103 of the pending claims. No specific agreement was reached.

The substance of the discussion and arguments in the telephone interview is included in the present remarks.

Claim Objections

On page 2 of the Office Action, claims 1, 7, 12, and 16 were objected to due to informalities. As discussed during the aforementioned telephonic interview, Applicants submit herewith amended claims 1, 7, 12, and 16 pursuant to the Examiner's suggestions that address the Examiner's concerns. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objections to claims 1, 7, 12, and 16.

Rejections under 35 U.S.C. § 103

Claims 1, 4, 7-9, 12-13, 15, 16, 18, and 20-23 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Pat. No. 6,094,423 to Alfano ("Alfano") in view of U.S. Pat. No. 4,691,314 to Bergins *et al.* ("Bergins"). Applicants respectfully traverse this rejection for the reasons stated below.

As discussed during the aforementioned interview, without acquiescing to the propriety of the rejections, and merely to expedite prosecution, Applicants have amended claims 1, 7, 10, 12, 14, and 16.

Claims 1, 7, 12, and 16

Independent claims 1, 7, 12, and 16 recite features that distinguish over the applied references. For example, claims 1 and 12 as amended herein recite, *inter alia*:

a determining device configured to select an appropriate packet size for transmission data to be packetized, the appropriate packet size being selected according to:

...

packet sizes among the packet sizes that are recognizable by the destination communication device that can be transmitted by the wireless communication device; and

selecting an appropriate packet size for transmission data to be packetized, the appropriate packet size being selected according to:

...

packet sizes among the packet sizes that are recognizable by the destination communication device that can be transmitted by the computing device;

respectively.

Further, for example, claims 7 and 16 as amended herein recite, using respective language, among other features:

selecting an appropriate packet size for transmission data to be packetized, the appropriate packet size being selected according to:

...

packet sizes among the packet sizes that are recognizable by the destination communication device that can be transmitted by the communication terminal device[.]

Alfano teaches that transaction protocols merely include "a short request for information by an initiator and a response to the request from the recipient." (Alfano, col. 2, lines 15-17). Alfano further teaches that "an ideal solution" is performed by using the transaction protocol in cases where the transaction protocol is sufficient to carry messages "and a connection-oriented protocol in *all other cases*." (Alfano, col. 2, lines 50-54 (emphasis added)). However, as discussed during the aforementioned interview, Applicants submit that Alfano's technique for transitioning from a transaction protocol to a connection-oriented protocol based upon a single, short request for information and a single response to the request does not teach or suggest the above-noted selection of packet sizes according to, *inter alia* "packet sizes among the packet sizes that are recognizable by the destination communication device that can be transmitted by the communication terminal device," as recited, using respective similar language, in claims 1, 7, 12, and 16.

With reference to previously pending claims 1 and 4, the Examiner concedes that Alfano "fails to disclose the method wherein a receiver configured to receive a response to the query from the destination communication device and wherein the appropriate packet size is smaller than the packet sizes that are recognizable by the destination communication device and a retransmission request that occurs in response to detecting a communication error or traffic congestion on a communication link established between the transmitting . . . devices and the destination communication device, the retransmission request occurring while packets are being transmitted and the appropriate packet size being selected according to data communication rates for packets previously transmitted to the destination communication device." (Office Action, pages 4-5).

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Applicants agree and further note that Alfano teaches that a transaction protocol, in comparison to a connection-oriented protocol, "has a low implementation and operating cost" and that the use of a transaction protocol is not always possible since transaction protocols are "designed around a maximum amount of data being allowed to be transmitted in each message exchange." (Alfano, col. 2, lines 31-36.).

Alfano discloses "using a connection oriented protocol upon determining that the response from the server (or from the communication device 50) is greater than the maximum transfer unit size." (Alfano, col. 5, lines 55-57). Alfano further discloses initiating a "wireless request as a connection oriented protocol when the wireless request exceeds the maximum transfer unit size." (Alfano, col. 5, line 63 to col. 6, line 4). Alfano teaches using "a connection oriented protocol in sending data packets to a server when the wireless request exceeds the maximum transfer unit size" (Alfano col. 6, lines 17-21). Thus, Alfano teaches transmitting a single "wireless request" from an initiating communication device and receiving a single response from "the server."

In Alfano's system, if the response to a request sent by an initiator is greater than a single maximum transmission unit (MTU), the responder (i.e., the recipient) will segment the message and eventually begin to execute a connection-oriented protocol. (Alfano, col. 5, lines 53-60). However, Alfano fails to teach or suggest at least that the message segments are selected according to, *inter alia*, "a retransmission request that occurs in response to detecting a communication error or traffic congestion on a communication link established between the communication terminal device and the destination communication device occurring while packets are being transmitted, wherein the appropriate packet size is smaller than the packet sizes that are recognizable

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by the destination communication device and sizes of the packets previously transmitted to the destination communication device," as recited, using respective similar language, in claims 1, 7, 12, and 16.

Bergins fails to cure the acknowledged and above-noted deficiencies of Alfano. Bergins is stated by the Examiner to teach "the method wherein a receiver configured to receive a response to the query from the destination communication device and wherein the appropriate packet size is smaller than the packet sizes that are recognizable by the destination communication device . . . and a retransmission request that occurs in response to detecting a communication error or traffic congestion on a communication link established between the transmitting . . . devices and the destination communication device, the retransmission request occurring while packets are being transmitted and the appropriate packet size (**adaptive packet size**) being selected according to data communication rates for packets previously transmitted to the destination communication device." (Office Action, page 5 (emphasis in original)). Applicants disagree.

Even assuming *arguendo* that Alfano and Bergins can be properly combined in the manner suggested by the Examiner and that the Examiner's characterization of Bergin's adaptive packet size as teaching the retransmission request recited in the claims is correct, neither of which Applicants acquiesce to, Bergins fails to provide the missing teaching or suggestion of Alfano with respect to claims 1, 7, 12, and 16, as noted above. Bergins discloses that "the modem transmitting the data will check if the line quality is the lowest possible acceptable line quality" and "[i]f such is the case, *the packet size will be limited to the lowest acceptable packet size*" (Bergins, col. 6, lines 57-61 (emphasis

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added)). Bergins further discloses that "intermediate line qualities are tested from a lower quality to a higher quality" and "[i]f the actual line quality falls within one of these tested line qualities, the packet size will be limited to an appropriate size for that line quality" (Bergins, col. 6, lines 62-67). However, as discussed during the interview, nowhere does Bergins teach or suggest at least selecting packet sizes "according to: . . . packet sizes among the packet sizes that are recognizable by the destination communication device that can be transmitted by the communication terminal device," as recited, using respective similar language, in claims 1, 7, 12, and 16.

Bergins describes process "for sending a data stream of characters in distinct data packets between two units of data terminal equipment" and "changing the packet size of the data which is transmitted" wherein "[a] ratio of retransmissions to transmissions is used to determine the optimum packet size." (Bergins, Abstract). However, the line quality testing and "adaptive packetizing with the maximum block size set to 256 bytes" (Bergins, col. 6, lines 26-27) discussed in Bergins fails to teach or suggest at least the above-noted distinguishing features recited in claims 1, 7, 12, and 16 directed to selection of packet sizes according to "packet sizes among the packet sizes that are recognizable by the destination communication device that can be transmitted by the communication terminal device." Moreover, nowhere does Bergins teach or suggest "wherein the appropriate packet size is smaller than the packet sizes that are recognizable by the destination communication device and sizes of the packets previously transmitted to the destination communication device," as recited, using respective language, in claims 1, 7, 12, and 16.

Thus, neither Alfano nor Bergins, taken alone or in the allegedly obvious combination, teach or suggest the above-noted distinguishing features recited in claims 1, 7, 12, and 16. Therefore, the allegedly obvious combination of Alfano and Bergins cannot be used to establish a *prima facie* case of obviousness for claims 1, 7, 12, and 16.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 103(a) rejection of claims 1, 7, 12, and 16 and pass these claims to allowance.

Claims 4, 8-10, 13-15, 18, and 20-23

At least based on their respective dependencies to claims 1, 7, 12, and 16, claims 4, 8-10, 13-15, 18, and 20-23 should be found allowable over the applied references, as well as for their additional distinguishing features. See *In Re Fine*, 837 F.2d 1071 (Fed. Cir. 1988) and M.P.E.P. § 2143.03.

Claims 10 and 14

At page 14 of the Office Action, claims 10 and 14 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Alfano in view of Bergins and further in view of U.S. Pat. No. 6,307,867 to Roobol *et al.* ("Roobol"). Applicants respectfully traverse this rejection.

Examiner concedes that the allegedly obvious combination of Alfano and Bergins fails to disclose "the feature of generating the retransmission request requesting a difference packet size to the destination communication device." (Office Action, page 14). Rather, the Examiner relies on Roobol to cure the acknowledged deficiencies of Alfano and Bergins. The Examiner states, which Applicants do not concede, that Roobol

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discloses "a method of receiving, after the transmitting a retransmission request requesting a different packet size." (Office Action, page 15). However, Roobal is not stated to teach or suggest, nor does Roobal teach or suggest, at least the above noted distinguishing features of claims 7 and 12. Thus, as Roobal cannot be used to cure the deficiencies of Alfano and Bergins the applied references cannot be used to establish a *prima facie* case of obviousness for claims 7 and 12.

Further, claims 10 and 14 as amended herein recite, using respective language: "receiving, after the transmitting, a retransmission request requesting a different packet size that reduces the amount of transmission data based upon the data communication rates for packets previously transmitted to the destination communication device." As discussed during the interview, Applicants respectfully submit that the above-noted features of claims 10 and 14 are not taught or suggested by the applied references, singly, or in the allegedly obvious combination. For this additional reason, claims 10 and 14 should be found allowable over the applied references.

At least based on their respective dependencies to claims 7 and 12, claims 10 and 14 should be found allowable over the applied references, as well as for their additional distinguishing features.

Accordingly, Applicants respectfully request that the rejections of claims 1, 4, 7-10, 12-16, 18, and 20-23 be removed and that these claims be passed to allowance.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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